

ZERO NET ENERGY AS AN AGENT OF CHANGE

WEDNESDAY, OCTOBER 5TH



COURSE DESCRIPTION

Zero Net Energy (ZNE) buildings has emerged as the gold standard of sustainable and integrated design, transitioning from an unattainable goal of energy-efficient design to a probable vision of the future. This session will take participants on a journey through time, to consider the future of the built environment as ZNE becomes the norm. Reaching beyond the nuts-and-bolts of how to complete a ZNE project, these four rapid-fire presentations will focus on larger-scale corporate, energy and policy discussions that will drive what building owners, community organizations and decision makers will need to grapple with as they attempt to meet this ZNE future. Throughout this discussion, the presenters will focus on the real-life challenges that are likely to be encountered by stakeholders as a ZNE world develops. This discussion will leave individuals with a sense or knowledge over how they can better prepare to be their own agent of change as a shared ZNE world is realized.



LEARNING OBJECTIVES & LEARNING LEVEL

Upon completion, participants will be able to:

1. Describe what a ZNE world of the future could look like.
2. Communicate the expected challenges that may be encountered as ZNE buildings and communities become the norm.
3. Understand the policy changes need to benefit the growth of the ZNE market.
4. Identify the preparations needed, in their own business and community, to prepare for a ZNE world.

Learning Level: 300



SESSION PRESENTERS



Danielle Vitoff, LEED AP
Program Manager
California Sustainability Alliance



Derek Jones, MPP
Associate Director
Navigant Consulting, Inc.

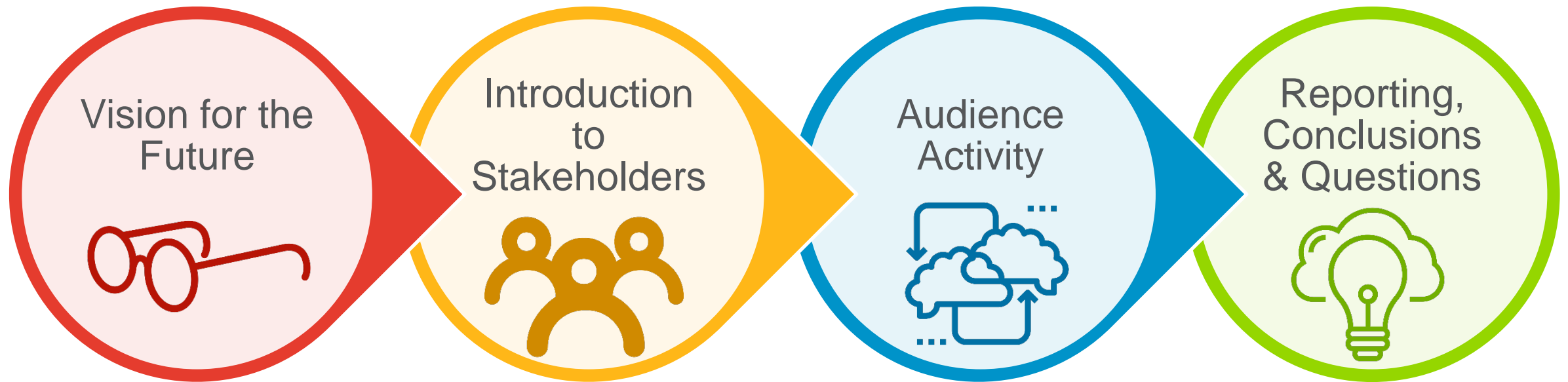


Noah Goldstein, LEED AP O+M
Director
Navigant Research



Carlo Gavina, LEED AP
Sustainable Program Manager
Southern California Gas Company

PRESENTATION OUTLINE



WHAT DOES A ZERO NET ENERGY FUTURE LOOK LIKE?



Energy in...



...equals...



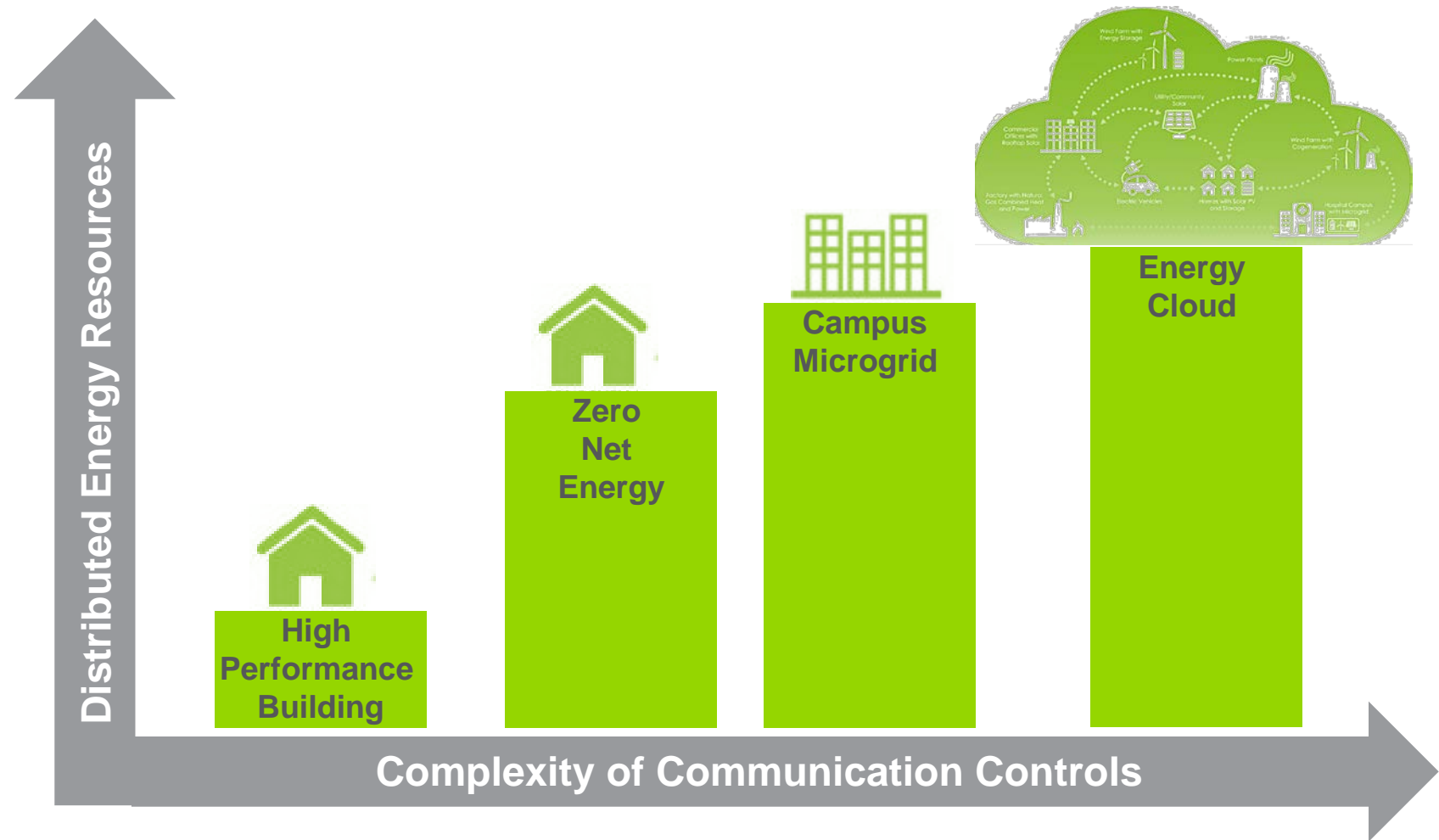
...energy out...



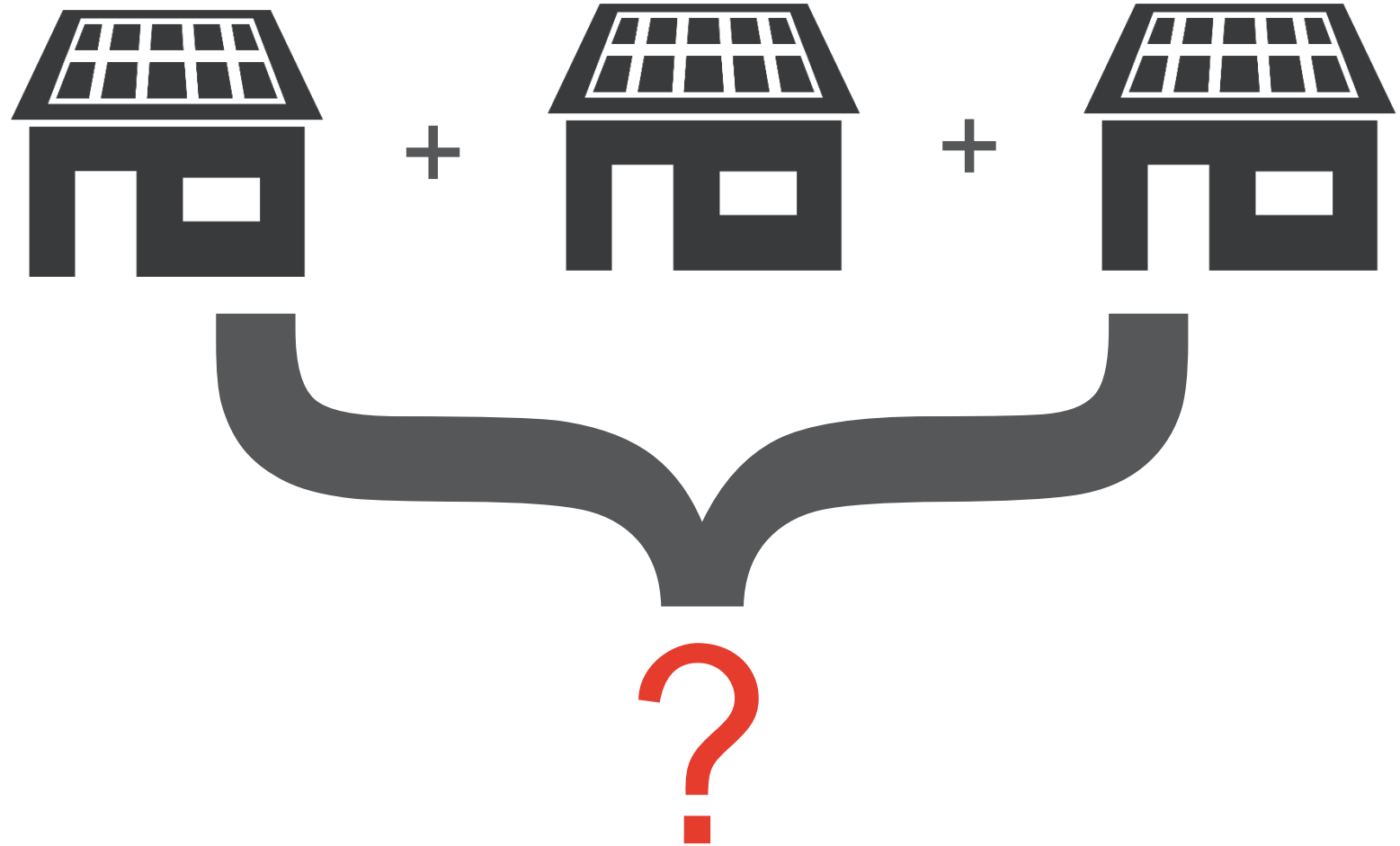
...every year.



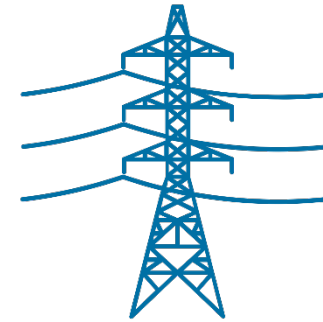
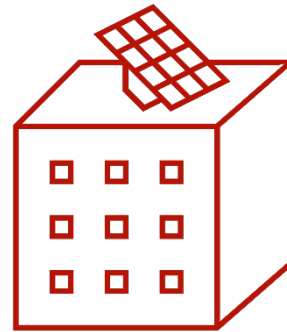
A VISION FOR THE FUTURE OF ENERGY IN BUILDINGS



WHAT DOES A ZERO NET ENERGY FUTURE LOOK LIKE?



WHAT MIGHT POSSIBLE END STATES LOOK LIKE?



End State	ZNE Buildings Future	Integrated DER Grid Future	Lowest Carbon Future
Lever	Building performance	Grid performance	Carbon reduction
Impact	Reduced building energy footprint on the grid	Networked buildings to maximize grid reliability and resiliency	Decarbonize energy serving buildings

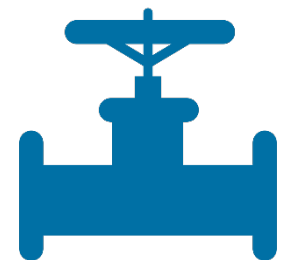
WHO ARE THE STAKEHOLDERS?

Intro to Stakeholders



1 
Residential Building Sector

2 
Commercial Building Sector

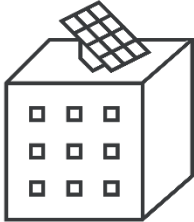
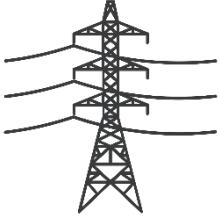




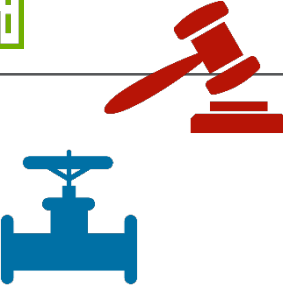


3 
Utilities

4 
Regulators



HOW DO THE END STATES AND STAKEHOLDERS FIT TOGETHER?

Intro to Stakeholders

<p>End States</p>	 <p><i>ZNE Buildings Future</i></p>	 <p><i>IDER Grid Future</i></p>	 <p><i>Lowest Carbon Future</i></p>
<p>Winners</p> <p>↑</p>			
<p>Losers</p> <p>↓</p>			

Audience Activity



Questions for Consideration:

1. Which end state is your stakeholder group most likely to support?
2. What is the biggest obstacle for your stakeholder group?
3. What are the biggest cost drivers for your stakeholder group?
4. What are the key partnerships that need to be in place for your stakeholder group to succeed?

STAKEHOLDER GROUP – AUDIENCE DISCUSSION

Audience Activity



Questions for Consideration:

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REPORTING & CONCLUSIONS

Reporting,
Conclusions
& Questions



	<i>Residential</i>	<i>Commercial</i>	<i>Utilities</i>	<i>Regulators</i>
<i>What still needs to be understood?</i>				
<i>Which end state is most likely?</i>				
<i>Which end state is least costly?</i>				
<i>What needs to be done and how?</i>				

Reporting,
Conclusions
& Questions



Questions?

CONTACTS

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